Appeal No. 2023-1357

**IN THE**
# UNITED STATES COURT OF APPEALS
**FOR THE FEDERAL CIRCUIT**

GOOGLE LLC,
*Appellant*,
v.

SONOS, INC.,
*Appellee*.

Appeal from the United States Patent and Trademark Office,
Patent Trial and Appeal Board in No. IPR2021-00962

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September 7, 2023

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# CERTIFICATE OF INTEREST

**Case Number:** 2023-1357

**Short Case Caption:** Google LLC v. Sonos, Inc.

**Filing Party/Entity:** Google LLC

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## I. INTRODUCTION

The '375 claims require an ordered structure: a user must be identified before modification and synchronization for that user. The logic and grammar of the claims require this construction. As does the specification, which describes the purpose of the invention as "personalized network searching," and only includes embodiments where a user is identified before modification and synchronization. Sonos's contrary arguments should be rejected.

Under the correct construction, the Board's obviousness determination lacks substantial evidence support. Mendez step 730 does not (and cannot) meet the claim requirement of "identifying a user" because step 730 occurs *after* modification and synchronization. Sonos's response brief does not change this. Moreover, Sonos and the Board incorrectly focus on Mendez's modification of bookmarks on a *server* as allegedly occurring after identification, but this disclosure is irrelevant because the claims require identifying a user before modifying bookmarks on a *client device*. To remedy these deficiencies, Sonos tries to defend the Board's sua sponte, alternative argument that it would have been obvious to identify a user before the other steps in Mendez. But this Court's precedent precludes the Board from making unsupported factual findings like this for the first time in a final written decision. Under the proper construction, the Board's obviousness determination should be reversed.

## II. ARGUMENT

### A. Properly Construed, the Claims Require Identifying a User Before Modification and Synchronization

The claims require "identifying a user" (step [1-1]) *before* modification (steps [1-2] and [1-3]) and synchronization (step [1-4]). Despite agreeing that steps [1-2] through [1-4] must be performed in order, Appx444-445, Sonos nonetheless asks the Court to find that step [1-1] does not require the same order. This makes little sense, particularly because step [1-1] provides antecedent basis ("identifying *a user*") for "*the* user" in steps [1-2] through [1-4]. Following this Court's reasoning in *Hytera*, it would be illogical to require steps [1-2] through [1-4] to be performed in order but then "disregard the antecedent basis in the [identifying] step and allow that one step to be performed out of order." *See Hytera Commc'ns Co. v. Motorola Sols.*, *Inc.*, 841 F. App'x 210, 218-19 (Fed. Cir. 2021).

Indeed, the Court's *Hytera* decision is directly on point and supports Google's construction. In *Hytera*, both parties agreed that "some of the steps of the method claim must be performed in order": the "transmitting" step must be last and the "selecting" step must come after the "determining" step. *Id.* at 218. The parties disputed whether the claimed "preparing" step had to come before the "determining" step. *Id.*

The Court found the claim's logic and grammar required the proper placement of the "preparing" step before the "determining" step for two reasons. *Id.* First, as is

the case here, the Court found that "each step [in] the method provides an antecedent basis for the steps that follow." *Id.* For example, the "preparing" step required "*a* '*timeslot*,'" and it provided antecedent basis for "*the* '*timeslot*'" in the "determining" step. *Id.* (emphases added). According to the Court, this supported finding that the "determining" step should come after the "preparing" step. *Id.* Second, the Court found—as a matter of logic—that it made no sense to construe the claim as requiring some steps to be performed in order but nonetheless "disregard the antecedent basis in the 'preparing' step and allow that one step to be performed out of order." *Id.* Finally, although the Court found the claim language dispositive, it noted that the "only embodiments are consistent with the plain meaning of the claim in the order that is written," and they support construing the claim to require the "preparing" step to occur before the "determining" step. *Id.* at 218-19. The facts of this case squarely align with those in *Hytera* and compel the same result.

Sonos fails to distinguish *Hytera*. Red Br. 33-34. Sonos simply argues *Hytera* "does not stand for the proposition that where *some* of a method claim's steps must be performed in order, courts may presume that *all* of the steps must be performed in order." *Id.* Google never argued for such a narrow proposition. Instead, Google argued that *Hytera* is instructive because the Court there required ordered performance of the method steps based on two facts: (a) other method steps were undisputedly performed in order; and (b) the claim used antecedent basis throughout

the disputed "preparing" step and other steps. *Hytera*, 841 F. App'x at 218-19. Those same two facts are true here, and thus the '375 claims should be construed to require "identifying a user" before modifying and synchronizing bookmarks for that user.

### 1. Google's Construction Is Supported by the Logic of the Claims

Sonos next argues logic does not require identifying a user at step [1-1] before bookmark modification (steps [1-2], [1-3]) and synchronization (step [1-4]). Red Br. 27-30. Sonos's argument is two-fold. First, Sonos argues step [1-5] can be performed without prior user identification and thus does not require user identification before modification and synchronization. Red Br. 27-28. Second, it argues with its "Anna" hypothetical that step [1-2] can occur after user identification and thus the claims do not require user identification before modification and synchronization. Red Br. 28-29. Neither argument is correct.

First, Sonos's step [1-5] argument is irrelevant and not responsive to Google's position, which focused on the required order of steps [1-1] through [1-4]. As Google argued in its opening brief, the logic of claim 1 requires "identifying a user" in step [1-1] before taking actions "for the user" in the later claimed steps. Blue Br. 23-24. Using steps [1-2] through [1-4] as examples, Google explained that it would not be possible to modify bookmarks "stored for the user" and synchronize "favorite items for the user" until that user is identified. *Id.* Google's nonobviousness argument then focused on Mendez's alleged step [1-1] occurring after its alleged steps [1-2] through

[1-4]. Blue Br. 34-37. Google did not rely on step [1-5] for this point. Thus, Sonos's argument about the order of step [1-5] is irrelevant. *See* Red Br. 27-28. Even if step [1-5] could be performed in a different order, it does not change the logical, explicit flow of steps [1-1] through [1-4], which formed the basis for Google's argument.

Second, Sonos's "Anna" hypothetical is flawed because it ignores key claim limitations. Red Br. 28-29. For example, Sonos ignores that claim 1 requires modifying and synchronizing items "*for the user*." To suggest that Anna's identity is irrelevant—and that items may be modified "for [Anna]" without first identifying her—improperly reads that requirement out of the claim. Moreover, the hypothetical is self-defeating because, even in the hypothetical, any alleged synchronization occurs *after* "Anna logs on to her user account" "at checkout." Red Br. 28. Sonos's hypothetical fails to support its position because it ignores certain limitations and facially fails to satisfy others.

Google's cited cases are not "inapposite," and Sonos fails to distinguish them in any meaningful way. *See* Red Br. 29-30. In *Mformation*, the Court reasoned that a step requiring "transmitting . . . from the server to the wireless device" had to occur after the step requiring "establishing a connection" between that server and wireless device. *Mformation Techs., Inc. v. Rsch. in Motion Ltd.*, 764 F.3d 1392, 1399-400 (Fed. Cir. 2014). Finding otherwise would defy the logic built into the claims. *See id.* So too in *Mantech Environmental Corp. v. Hudson Environmental Services, Inc.*,

152 F.3d 1368, 1375-76 (Fed. Cir. 1998). There, the Court reasoned that the steps had to be performed in order. *Id.* It explained that step (a) required providing wells, and step (b) required adding acetic acid to those wells, which could not be done until the wells in step (a) had been provided. *Id.* And so on through the remainder of the claim elements. *Id.* at 1375-76. The same sequential requirement exists here with the challenged claims. Step [1-1] requires identifying a user. Steps [1-2] through [1-4] require modifying and synchronizing favorite items "for" that user. And they cannot be performed until the user has been identified. [1]

### 2. Google's Construction Is Supported by the Grammar of the Claims

Sonos contends grammar does not support Google's construction. Red Br. 30-33. To that end, Sonos first argues that "just because the claim language references

[1] The *Interactive Gift* case Sonos cites is distinguishable. Red Br. 30. The challenged claims there required at step (1), "providing . . . the information to be reproduced to the information manufacturing machine, . . ." and at step (4), "receiving the request reproduction code . . . and reproducing in a material object the information identified by the catalog code . . . ." *See Interactive Gift Exp., Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1328 (Fed. Cir. 2001) (en banc) (citation omitted). The parties disputed whether step (1) had to be finished before step (4). The Court reasoned step (1) did not have to be performed first. *Id.* at 1343-44. But the claims at issue in *Interactive* are fundamentally different from the claims here. There, the claims lacked any tether suggesting that the information had to be received before a reproduction code could be received. *See id.* In contrast, the '375 claims *necessarily build* upon first identifying the user and then taking subsequent actions "for" that user, i.e., modifying and synchronizing bookmarks.

the 'same user' in each step . . . does not indicate identification . . . must take place first." Red Br. 30. According to Sonos, the Court "has never held that a method claim must be interpreted to recite a specific order only because it refers to th[at] same element throughout." Red Br. 31. But Google's argument is not premised on the number of times "the user" is recited in the claims—rather, it is based on antecedent basis used in the claims, which this Court has found highly relevant when construing claims to be performed in a specific order. *See, e.g.*, *Hytera*, 841 F. App'x at 218 (explaining "the fact that the 'determining' step says 'the' when it could have said 'a' reinforces our conclusion that it is meant to come after the 'preparing' step"); *Mantech*, 152 F.3d at 1375-76 & n.13 (finding steps had to be performed in order, where first step required "providing *a plurality of . . . wells*" and subsequent steps required building upon those plurality of wells, including "providing a treating flow of acetic acid from *one or more of said wells . . .*" (emphases added)). And when the antecedent basis in the '375 claims is properly considered, it shows that step [1-1] must come before admittedly ordered steps [1-2] through [1-4].

Sonos tries to dismiss the fact that steps [1-2] through [1-4] are all performed "for the user," saying it is a "prepositional phrase." Red Br. 31-33. But Sonos admits that the prepositional phrase "express[es] a relation between two objects" and also "indicates that certain actions are directed toward the same 'user' that is identified in step [1-1]." Red Br. 31. That the claims use a prepositional phrase for antecedent

basis does not change the calculus or undermine the fact that later claim steps refer back to, and necessarily require, previously identifying a user.

Sonos's "Anna" hypothetical does not show otherwise. Sonos contends Anna is saving leftovers "'for' a family member," but she need not know which member she is saving the food for. Red Br. 31-32. But even in this situation, the collection of "family member[s]" would have to be known before Anna could save food *for* them. Anna cannot save food *for* her family without knowing who qualifies *as* family. For this hypothetical to make sense, it would have to be adjusted so that Anna is saving food, without any indication of, or intention as to, those family members with whom she might share food. But in that situation, Anna is not saving food *for* anyone. This is in stark contrast to the challenged claims, where modification and synchronization happen with regard to favorite items "for the user." These claims only make sense if the user is identified before modification and synchronization occur.

Sonos next argues that the claims' failure to recite "the *identified* user" should be dispositive and free the claims from their ordered requirement. Red Br. 32-33 (emphasis added). But as Google explained, whether an "identified" moniker is used does not change the end result. Blue Br. 26-27. Neither the Board nor Sonos explains what "the user" refers back to, if not to the user in step [1-1]. And Sonos agrees that using "for the user" "indicates that certain actions are directed toward the same 'user' that is identified in step [1-1]." Red Br. 31. The "identified" moniker is not needed.

Nor does *Tuna Processors* hold otherwise. *Tuna Processors, Inc. v. Haw. Int'l Seafood, Inc.*, 327 F. App'x 204, 209 (Fed. Cir. 2009); *see also* Red Br. 32. In *Tuna Processors*, the use of the past participle confirmed the method steps there had to be performed in order; the Court did not hold that ordered structure is *only* appropriate when the past participle is used. *See* 327 F. App'x at 209. Nor could it. At least this Court's *Hytera* and *Mantech* decisions show otherwise. *See supra*. What matters is what the claims provide. And here, the claims provide "identifying a user," receiving an input "from the user," and then modifying and synchronizing "favorite items for the user." Appx74 (15:49-16:7). This supports finding an ordered structure requiring identifying a user before modification and synchronization. *See, e.g.*, *Hytera*, 841 F. App'x at 218.

Sonos incorrectly argues the admittedly ordered nature of steps [1-2] through [1-4] does not require step [1-1] to be similarly ordered. *See* Red Br. 33-34. Sonos argues that claim 1 uses "express language" to show the order for steps [1-2] through [1-4], but does not use "similar, sequential language" to also show an order for step [1-1]. *Id.* This is wrong because step [1-1] recites "identifying a user," and the next steps require receiving input "from *the* user" (step [1-2]) and then performing tasks "for *the* user" (steps [1-3] and [1-4]). Such "express language" supports Google's construction. Although the additional language from steps [1-3] and [1-4] that Sonos identifies reinforces the ordered structure, their ordered structure is also required by

the consistent use of "the user" throughout each step. All of this uniformly supports the conclusion that the claim steps must be performed in order.

### 3. Google's Construction Is Supported by the Specification

Sonos states that this Court created a two-part test to use when assessing if claim steps should be performed in order, and it notes the second part of that test assesses whether the specification "directly or implicitly requires" performing the claim steps in order. Red Br. 27, 34. According to Sonos, "Google does not even argue that this component of the test is satisfied." Red Br. 34. Not so. Google stated that, in "addition to considering logic and grammar, the Court considers whether the specification directly or implicitly requires an order"—the very same standard Sonos cites. Blue Br. 27 (internal quotation marks and citation omitted). Google then analyzed the specification to show how it directly or implicitly requires an order to the claimed steps. Blue Br. 27-33. It is unclear what further analysis Sonos thinks is required. Even in the *Altiris* case Sonos cites, this Court evaluated the embodiments and purpose of the invention in the specification as part of the second prong. *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369-71 (Fed. Cir. 2003); *Respironics, Inc. v. Invacare Corp.*, 303 F. App'x 865, 871 (Fed. Cir. 2008) ("only embodiment" in the specification supports requiring steps performed in order); *Mformation*, 764 F.3d at 1400 (construction was "consistent with the sole embodiment in the specification"); *Hytera*, 841 F. App'x at 219 (construction also "supported by the

embodiments in the specification"). That is what Google asked this Court to do. Blue Br. 27-33.

Indeed, starting with the invention's purpose, the '375 patent focuses on *personalizing* network searching. Appx60 (Title, Abstract); Appx69-70 (5:16-25, 6:60-7:1, 7:19-21, 7:36-42); Appx67 (1:45-2:37); Appx64 (Fig. 2); Appx1981-1982 (¶¶ 29, 31); Appx1986-1987 (¶ 38)); *see also* Blue Br. 27-29. Sonos agrees with this but tries to argue that it is "only a piece of claim 1," specifically only step [1-5]. Red Br. 35-36. But that ignores every other limitation in the claims, which require modification and synchronization of favorite items *for the user*. Appx74 (15:49-16:7). This "for the user" language emphasizes how the claims focus on *the user* and personalizing network searching *for that user*. *Id.*; *see also* Blue Br. 27-29; Appx1981-1982 (¶¶ 29, 31); Appx1986-1987 (¶ 38)). The claimed personalized network searching cannot be done unless and until a user has been identified—specifically before modification and synchronization. *See* Blue Br. 27-29.

Sonos cites Mendez and contends that, even if the purpose of the '375 patent is personalizing network searching, that can be done without identifying a user first, and Google agreed to as much. Red Br. 36-37. At no point did Google agree Mendez focuses on personalized searching. In fact, Google repeatedly argued the opposite, namely, that Mendez is device-centric (not user-centric) and focuses on providing a global format so its bookmarks are compatible across multiple devices. *See* Blue Br.

11-15 (heading: "Mendez Does Not Disclose Personalized Network Searching nor Does It Identify Any User Before Its Bookmark Modification and Synchronization Occur"). For that reason, Mendez does not teach (much less care about) identifying the user before modification and synchronization. *See infra* Sections II.B.1, II.B.2. Mendez's teachings have no bearing on what the '375 patent describes as the purpose of its invention or how that purpose is achieved.

The embodiments in the '375 patent also support Google's construction. Blue Br. 29-33. Figure 2 and its accompanying disclosures show the requirement of identifying a user *before* modification and synchronization to accomplish "personalized network searching." *E.g.*, Appx64 (Fig. 2); Appx70 (7:36-65); Appx1985-1986 (¶ 37). The '375 specification explains "the bookmark manager 128 *first* receives a valid user identifier," and "[u]sers who desire synchronization . . . need to identify themselves" so the bookmark manager has necessary information. Appx70 (7:36-42) (emphasis added).[2] After the user is identified, the patent explains

[2] Sonos contends that Google takes this language out of context. Red Br. 38. Not so. This language is quoted from the specification in series, doing no more than reciting each quotation in its surrounding context. Indeed, the specification recites:

> In the embodiment shown, the bookmark manager 128 first receives a valid user identifier (ID) 202 from the client 102a. Users who desire synchronization across different browsers/computers or other types of personalization need to identify themselves to the bookmark manager 128 to some extent so that the bookmark manager 128 has a primary

the bookmark manager "*then* receives" information for modifying bookmarks. *E.g.*, Appx70 (7:50-65) (emphasis added). This first/then discussion aligns with the ordered structure in the claims and requires construing the claims in an ordered fashion.

Sonos tries to avoid this disclosure, arguing that it is merely exemplary. Red Br. 37. Sonos contends the specification explains "'identification' may be accomplished in 'numerous ways,'" and limiting the claims would be "inappropriate." Red Br. 37-39 (quoting Appx70 (7:42-44)). But Sonos ignores that the phrase "numerous ways" refers to *how* a user is identified, not *when*. The only disclosure of *when* a user is identified is "first." The specification states that the bookmark manager "*first* receives a valid user identifier," and it "can perform th[at] identification and authentication in numerous ways." Appx70 (7:36-44) (emphasis added). That there are different ways to identify a user does not address the relevant

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> key with which to store a user's bookmarks. The bookmark manager 128 can perform the identification and authentication in numerous ways. For example, in one embodiment, the IP address is tracked throughout a session. In another embodiment, the authentication is done via a user manager system. In another embodiment, a cookie on the client 102a may include user-identifying information, which is supplied to the bookmark manager 128 by the client 102a. The bookmark manager 128 then receives the URL for the site that the user identifies 204. . . .

Appx70 (7:36-51).

question of *when* identification must occur. And the answer is *before* modification and synchronization.

Sonos cites two passages to nevertheless suggest that users could be identified after modification and synchronization. The first relates to a cookie on a client device as a means to identify the user. Red Br. 38 (discussing Appx70 (7:47-48)). But there is nothing in the specification to suggest that a cookie would be used to identify the user after modification and synchronization. To the contrary, the sentences before what Sonos refers to explain that the bookmark manager "*first* receives a valid user identifier," Appx70 (7:36-44) (emphasis added), which can include receiving a user identifier by a cookie. Appx70 (7:47-49)). In the subsequent sentences, the specification explains that the bookmark manager "*then* receives the URL for the site that the user identifies." Appx70 (7:50-51) (emphasis added). This is the only order provided in the specification—and *how* a user may be identified does not change *when* the user must be identified.

The second disclosure Sonos cites also fails to support its position. Red Br. 38-39. Column 5, lines 39-41 simply state: "a user's set of bookmarks can be primed on a server by having the user POST their bookmarks file to the server, and the user can be permitted to download the bookmarks . . . ." Appx69 (5:39-43). This sentence and the ones surrounding it offer nothing about user identification, modification, or synchronization; they simply provide that the user can track their bookmarks on the

server. Appx69 (5:34-54). Again, that is a different question than what is at issue for the claims, which require a user to be identified before bookmarks are modified and synchronized.

As such, Google's construction does not exclude any embodiments. *See* Red Br. 37-41. The specification's only discussion of *when* the user must be identified is before modification and synchronization. This requires the steps to be performed in their recited order. Such an analysis is consistent with how this Court has construed similar claims in the past. *E.g.*, *Respironics*, 303 F. App'x at 871 (finding the "only embodiment" in the specification supports requiring steps being performed in order); *Mformation*, 764 F.3d at 1400 (conclusion "consistent with the sole embodiment in the specification"). That same result is required here.

*Altiris* is distinguishable.[3] Red Br. 40-41. First, the claims' plain language in *Altiris* did not require an ordered structure. *Altiris*, 318 F.3d at 1367-71. There was no use of antecedent basis to show how the claim steps relied on each other. *See id.* Here, by contrast, the logic and grammar of the '375 claims show that the user *needs to be* identified before modification and synchronization. *See* Sections II.A.1, II.A.2.

[3] In its summary of this case, Sonos misstates the district court's claim construction in *Altiris*. Sonos states "[t]he district court held that the 'setting' step of the procedure must be performed before the 'testing' step." Red Br. 40-41. The court, however, found that "the 'setting' step must occur after the 'testing automatically' step and before the 'booting normally' step." *Altiris*, 318 F.3d at 1367; *see also id.* at 1369.

Second, *Altiris*—a pre-*Phillips* decision—relied on *Texas Digital* to downplay the role that the specification plays and elevate the role of dictionary definitions in claim construction. *See Altiris*, 318 F.3d at 1370. But the Court rejected this methodology in *Phillips*, where it confirmed the specification "is always highly relevant," usually "dispositive," and "the single best guide to the meaning of a disputed term." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

When the '375 specification is properly considered, it shows that "a user" must be identified before modification and synchronization. In this way, this case aligns with *Mformation*, *Respironics*, and *Hytera*, where this Court reasoned that the embodiments, even a *lone embodiment* in a specification, can support requiring order in the claimed steps. *Respironics*, 303 F. App'x at 871; *Mformation*, 764 F.3d at 1400; *Hytera*, 841 F. App'x at 219. Finally, as Sonos notes, *Altiris* held that the patent specification did not compel an ordered structure because there was no indication in that specification that "this order is important." *See Altiris*, 318 F.3d at 1371; Red Br. 41. But that is *not* the case here. As noted above, the '375 specification discloses a user is identified "first." Appx70 (7:36-51). It then explains that this is important, because users "who desire synchronization across different browsers/computers . . . need to identify themselves . . . so that the bookmark manager 128 has a primary key with which to store a user's bookmarks." *Id.* The

'375 claims should be construed to require "identifying a user" before bookmark modification and synchronization.

### B. The Board's Unpatentability Determination Lacks Substantial Evidence Support

#### 1. Mendez Does Not Disclose Identifying a User Before Modification and Synchronization; Sonos's Reliance on "Log-On" Does Not Remedy This Deficiency

The challenged claims require:

- first "identifying a user" (step [1-1]),
- having that user input into a client device an "input indicating a modification to a set of favorite items for the user" (step [1-2]),
- "in response to receiving the user input," "modifying the set of favorite items stored for the user in a client-side storage of the client device" (step [1-3]), and
- initiating a synchronization process with a server storage system (step [1-4]).

Appx74 (15:49-16:7). Sonos does not dispute that it mapped step [1-1] to Mendez step 730. *See* Red Br. 43-53. Nor does it dispute that step 730 occurs *after* workspace modification (steps [1-2], [1-3]) and *after* synchronization starts (step [1-4]). *See id.* Instead, Sonos argues that because user identification information is relayed to the

server at Mendez's step 730, such information "must exist on the client device before step 730 is performed." Red Br. 44.[4]

Sonos's argument lacks merit. That Mendez relays identification information does not answer the question of *when* identification information is acquired. Mendez discloses that, at step 730 in Figure 7, a communications module establishes a secure communications channel between a device and server. Appx1529 (9:23-25). Mendez explains that this communications module may include routines for applying user identification techniques. Appx1527 (6:30-35). There is no discussion here of *when* identification information is acquired, much less a reason to think such information is acquired at a time other than when the channel is established at step 730. This does not disclose the user being identified *before* modification (steps [1-2] and [1-3]) and synchronization (step [1-4]), as the claims require. *See also* Blue Br. 37.

As part of this argument, Sonos contends that Mendez discloses identification at log-on, and that this occurs before workspace modification and synchronization. Red Br. 45-47, 50-53.[5] What Sonos cites for this argument, however, simply states that "predetermined criteria" may be set so that the synchronization module can start

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[4] Sonos also wrongly contends that Google "ignore[d]" this argument in its opening brief. Red Br. 44. Google addressed this argument at Blue Br. 37.

[5] Sonos again wrongly contends that Google "fail[ed] altogether to address" this in its opening brief. Red Br. 45-47, 50-53. Google addressed this argument at Blue Br. 37.

to synchronize workspace elements, and the criteria to initiate a sync could be set on "user request, at predetermined times during the day . . . , or after a predetermined action such as . . . log-on." Appx1525 (2:17-29). At best, this explains that log-on (and any associated user identification) occurs before *synchronization*. *See, e.g.*, *id.*; Appx1524 (Fig. 7) (showing that determination as to whether "Predetermined Start Criteria" have been met occurs at step 720, and not the first step of Mendez's process before bookmark modification). It does not, as Google argued in its opening brief, "address the other part of Dr. Madisetti's testimony that Mendez does not disclose identifying a user prior to *modifying*" local workspace elements—steps [1-2] and [1-3]—as the claims require. Blue Br. 37. Thus, even Sonos's arguments on Mendez's log-on process fail to show identifying a user prior to *modification* of the workspace elements.

#### 2. Mendez Figure 6 Does Not Disclose This Element; It Pertains to Bookmarks on the Server, Not on a Client Device, as the Claims Require

Sonos also argues that Figure 6 of Mendez discloses user identification prior to modification and synchronization. Red Br. 47-50. But this argument improperly conflates things happening on a client device with things happening on a server. Blue Br. 38-39. The '375 claims squarely focus on user input and modification to favorite items "stored for the user in a client-side storage." Appx74 (15:49-16:7). It is, thus, irrelevant if and when modifications may be made to any favorite items on the server,

and Sonos's attempt to rely on things happening on the server to meet the limitations should be rejected.

Mendez explains that its system includes a computer connected to a global server protected by a global firewall. Appx1525-1526 (2:62-3:3). The global server "acts as a third party administrator," and it "stores independently-modifiable copies" of workspace data. Appx1526 (3:66-4:10). Mendez explains that the global server maintains data "in a format, referred to as a 'global format,' which is selected to be easily translatable by the global translator" residing on the global server. Appx1526 (4:11-22); *see also* Appx1518 (Fig. 1). According to Mendez, its global translator "incorporates all the information needed . . . to create the Global Format." Appx1528 (8:47-62). Specifically, the global translator can add information, such as the name, last modified date, and user identification, for elements stored on the global server. *Id.* Importantly, all of this disclosure focuses on what is happening on the server side (which Sonos does not dispute). *See* Red Br. 47-50. It does not address the timing for identifying the user relative to the modification and synchronization taking place *on a client device*, which is the relevant issue for the challenged claims. Blue Br. 38-39; *see also* Appx483-486.

Sonos states that this argument is "non-responsive" because the server stores a "copy of each workplace element" and, therefore, if the server-side copy includes identification information, then so too must the client-side copy. *See* Red Br. 48. But

this is pure attorney argument, and Sonos does not cite any evidence that Mendez's client-side workplace elements must be stored with the same information stored with its server-side workplace elements. *Id.* Nor can it, because Mendez discloses *adding* user identification information to the server-side workplace elements, contradicting Sonos's assertions. Specifically, it discloses a global translator that changes elements into a *distinct global format* and maintains those elements in that global format to improve the elements' compatibility across different search engines. *E.g.*, Appx1526 (3:30-4:22); Appx1528 (8:47-62). To do this, the global translator separately adds information, like user identification, to "create the Global Format." Appx1528 (8:47-62). This is *not* merely copying an element previously modified on the client device; rather, it is modifying an element in the global server to be in a new format, and modifying the element in the global server to have information that it did not otherwise have on the client device.[6] *Id.* It does not teach or suggest information is "necessarily appended" to bookmarks on the client device, Red Br. 48, or otherwise

[6] Sonos states that the idea of different users using the server would "conflict[] with the position Google took below." Red Br. 49 (quoting Appx484). But a fair reading of Appx484, the expert declaration cited therein, Appx1995-1996 (¶ 55), as well as the surrounding paragraphs in the Patent Owner Sur-Reply, demonstrate that Google was talking about "client" devices, not the server. *E.g.*, Appx484-485. There is no inconsistency. Moreover, Mendez calls its server the "global server." Appx 1525 (1:61-63). Not only would it be nonsensical for there to be one, and only one, server per user, but Mendez makes clear that its "global server" is meant to be connected to multiple users. *Id.*

address the relevant question for the '375 claims—whether user identification occurs before modification on the client device.

Sonos last submits that Mendez discloses bookmarks stored on a client device could contain "version information," and that doing so requires knowing which user last modified a bookmark. Red Br. 49-50. Again, Sonos cites nothing to support this speculation and attorney argument. *Id.* And nothing about this disclosure illustrates that user identification occurred before bookmark modification on the client device. Indeed, bookmarks may be modified before a user is ever identified. Knowing "date and time of the last modification" does not require knowledge of which user changed the bookmark. *See* Appx1527 (5:35-39). Nor does knowing the "status as of the last interaction with the global server" require knowledge of any user. *See id.* The system connects client devices with a global server. Appx1518 (Fig. 1). Knowing when the bookmark might have interacted with the server does not require knowing the user; indeed, multiple users might use the client device and synchronize bookmarks. There does not have to be user identification to know if a bookmark may have synchronized with the server. Even Mendez acknowledges its system "may operate unattended by the client user." *See* Appx1525 (2:38-40).

### 3. The Court Should Reject the Board's Sua Sponte, Alternative Obviousness Theory

In a footnote, the Board adopted a position neither party raised—that it would have been obvious to a skilled artisan to identify a user as the first step of a computer-

implemented method, such as at log-on. *E.g.*, Appx21 n.11. As Google explained in its opening brief, however, the theory was raised and addressed for the first time in the Final Written Decision, and Google was deprived of any meaningful opportunity to challenge what would have been "well-known and conventional." Blue Br. 39-41 (quoting Appx21 n.11); *see In re Nuvasive, Inc.*, 841 F.3d 966, 971 (Fed. Cir. 2016). This cannot provide a basis to affirm the Board's unpatentability determination.

Sonos contends that it raised such an argument. Red Br. 55-56. Not so. Sonos first cites its argument that it would have been "highly obvious and required" for a "synchronization process [to] include[] user identification." *Id.* (quoting Appx239); *e.g.*, Appx21. This argument, however, only opines that it would have been obvious to a skilled artisan to identify a user in a synchronization process *generally*. Appx20-21. Indeed, Sonos included this point in its Petition in the limited context of showing that Mendez step 730 discloses user identification. Appx237-239. It was not offered to argue about the *timing* of when user identification should occur. *Id.* Sonos further argues that it cited Nakagawa paragraph 362 in this discussion to show that it would have been obvious for user identification to happen before bookmark modification and storage. Red Br. 55-56. But Nakagawa paragraph 362 simply shows that user log-on may be one way to identify a user, again *generally*, rather than specifically before any modification occurs. Appx1677 (¶362). Nakagawa does not disclose or

suggest user identification *before* modification—which the claims require—nor did Sonos rely on Nakagawa to show as much in the Petition. Appx239.

Sonos also points to its reply brief, Red Br. 56 (citing Appx447), to suggest this argument was raised there as well; it was not. Appx447. Rather, Sonos argued that Mendez discloses a user logging on and that user identification information can be appended to bookmarks on a global server. Appx447. But as addressed above in Sections II.B.1, II.B.2, Sonos's arguments do not show that Mendez discloses identification *before* modification on a client device, nor do they contend that it would have been obvious, as a matter of general knowledge to a skilled artisan, to have identification occur *as the first step*.[7] This cannot provide the basis to affirm the Board's decision.

Sonos next contends that Google admitted it would have been "highly obvious and required" to have user identification before bookmark synchronization. Red Br. 54 (quoting Appx21). But this misstates what the Board stated in its Final Written Decision and misstates what Google argued in its Patent Owner Response. Appx21;

[7] Sonos's reliance on the trial testimony is also unavailing. Red Br. 56; Appx2104 (14:1-19). There, Sonos reiterates its arguments about Mendez's disclosure as to step 730, Figure 7, and generally wanting user identification in a synchronization process. Appx2104 (14:1-19). The first two are lacking, as discussed above. And the third, for the reasons noted above, still fails to address the relevant *timing* question here—why and whether a skilled artisan would have considered it obvious to identify the user as the first step.

Appx400. For the former, the Board expressed its view that Google had agreed user identification is a "highly obvious" part of a synchronization process, again, only *generally*. Appx21. But this does not touch on the relevant *timing* question. Even if user identification were an obvious part of synchronization, it does not necessarily follow that it would have been obvious to identify a user before modification, which is what Google argued in its Patent Owner Response. Appx400. There, Google stated that Sonos's argument "only addresses associating devices with a user. It does not address that the user must be identified prior to modifying favorite items." Appx400. Contrary to Sonos's argument, Google did not agree to any characterizations Sonos proffered as to what was "highly obvious," and even if it did, it did not agree that it would have been obvious to identify a user before modification, as Sonos states in its red brief. *Cf*. Red Br. 54 (citing Appx400).

Sonos last argues that "Google makes no attempt to dispute the substance of the Board's conclusion" that it would have been obvious to identify a user first. Red Br. 53. But Google already explained that there is no evidence from the record (and the Board cites none in its footnote) as to the supposed obviousness of identifying a user *before* modification and synchronization. Blue Br. 41; *see* Appx21 n.11. That the Board might rely upon "common sense *in addition* to record evidence," Red Br. 56-57, does not relieve it of the obligation to nevertheless *have some record evidence* for support. *See In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) ("[T]he Board

cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense. Rather, [it] must point to some concrete evidence in the record in support of these findings."). Sonos's cited cases do not suggest otherwise. Red Br. 56-57. The Board's alternative footnote theory should be rejected. Appx21 n.11.

## III. CONCLUSION

For the reasons above and in Google's opening brief, the Court should reverse the Board's Final Written Decision that claims 1-11 and 13-16 of the '375 patent are unpatentable or, if deemed necessary, vacate and remand for further proceedings.

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Respectfully submitted,

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**FORM 19. Certificate of Compliance with Type-Volume Limitations** **Form 19**
**July 2020**

# UNITED STATES COURT OF APPEALS
# FOR THE FEDERAL CIRCUIT

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